GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA

STARRED QUESTION NO:90
ANSWERED ON:08.02.2017
Desalination Plants
Godse Shri Hemant Tukaram

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government has formulated any scheme to set up a large number of desalination plants in the coastal areas of the country for producing drinking water from sea water;

(b) if so, the details thereof and the time by which the said scheme is likely to be implemented;

(c) the per litre cost of drinking water so produced from these plants;

(d) the places/locations where desalination plants have been set up and made operational along with those planned for the future; and

(e) the steps taken to popularise the technology to convert sea water into potable water?

Answer

THE MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(Dr. HARSH VARDHAN)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) to (e) OF THE LOK SABHA STARRED QUESTION NO. *90 REGARDING DESALINATION PLANTS FOR ANSWER ON 8th FEBRUARY, 2017.

(a) No, Madam.

(b) Ministry of Earth Sciences has no scheme as of now to set up a large number of desalination plants in the coastal areas of the country for producing drinking water from sea water. However, three desalination plants have been developed and demonstrated, based on the Low Temperature Thermal Desalination (LTTD) technology indigenously by the National Institute of Ocean Technology (NIOT), an autonomous body of the Ministry of Earth Sciences.

(c) The cost per liter of desalination would depend on the technology used and cost of electricity which varies from place to place. According to the cost estimates made by an independent agency for LTTD technology, the operational costs per litre of desalinated potable water is about 61 paise for island based plants.

(d) Three desalination plants, based on LTTD technology have been successfully commissioned by NIOT one each at Kavaratti, Minicoy, and Agatti islands of the Union Territory of Lakshadweep. The capacity of each of these LTTD plants is 1 lakh litre of potable water per day. One experimental LTTD plant using condenser waste heat from power plant was set up at North Chennai Thermal Power Station (NCTPS). The Lakshadweep Administration requested for setting up of similar LTTD plants of 1 lakh litre of potable water per day capacity in remaining six islands. The Ministry of Drinking Water and Sanitation is dealing with this request. NIOT is providing technical support for the implementation.

(e) Information about the desalination program and technology has been disseminated through newspapers, pamphlets, websites and annual reports of Ministry of Earth Sciences and National Institute of Ocean Technology. The models of LTTD plants setup by NIOT are displaced in all the major exhibitions and important science forums.